

Selection of Nobel Prizes

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There are few individuals that are so well known to the worldwide scientific community as Alfred Nobel. He was born in 1833 in Stockholm and grew up in Stockholm but parts of his teens were spent in St Petersburg, Russia. When Alfred Nobel was 20 years old he was sent to Professor Pelouze, a world-famous chemist, in Paris. It was at Professor Pelouze's laboratory that Alfred Nobel learnt about nitroglycerine from another visiting scientist at Pelouze's laboratory, Ascani Sobrero. Alfred Nobel was fascinated by the highly explosive nitroglycerine and realized its potentials as an explosive. He demonstrated that he could control the explosive liquid by mixing it with kieselghur creating dynamite. Alfred Nobel became extremely rich via his patents of various inventions first of the dynamite but then on various detonators. He is well described and characterized as an Internationalist, Scientist, Entrepreneur and Humanist.

In his will and testament, opened after his death in 1896, he states that the majority of his fortune (31 out of 33 million Swedish kronor) should be used for five prizes to those who "have conferred the greatest benefit on mankind". The five areas that should get equal parts were:

**Physics; for the most important discovery or invention.*

**Chemistry; for the most important chemical discovery or improvement.*

**Physiology or Medicine; for the most important discovery.*

**Literature; for the most outstanding work of an idealistic tendency.*

**Peace; to the person(s) or organizations who have done the most or the best work for fraternity between nations, or for the reduction of standing armies, or for holding peace congresses.*

In addition to the five Nobel Prizes a prize in economics was added in 1969. This was based on a generous gift from the Swedish National Bank in the memory of Alfred Nobel.

In order to fulfil Alfred Nobel's will a Foundation was established in 1900. The first prizes were awarded in 1901. It is the Foundation that is responsible for organizations and structures around the Nobel Prize. The Foundation is also the visionary body embracing strategies for the future.

The Nobel Foundation has delegated the scientific working process on the different prizes to Committees at Karolinska Institutet for the prize in Physiology or Medicine, to the Norwegian Nobel Committee for the Peace prize, to the Swedish Academy for the prize in Literature and to the Royal Swedish Academy of Sciences for the prizes in Chemistry and Physics. It is also the Royal Swedish Academy of Sciences that appoints the prize winners in economics.

In order to be awarded the Nobel Prize the candidate must have been nominated during the year. The moment of discovery is the most important scientific criterion. It is the intention that researchers all over the world shall have the possibility to initiate the nomination procedure. Invitations to nominate are being sent, in September every year, to universities and institutions worldwide. The dead line for nominations is February 1. The idea from Alfred Nobel was that peers/competitors in the scientific community are best equipped to identify that a most important discovery, invention or improvement has been made. Hence, a bottom-up structure was suggested already in his testament and is still the main principle. The Committees investigate nominations and protocols are written for each new nomination. In April and May preliminary reports on selected candidates are ready and full reports are produced during the summer. In September, after careful evaluations of all reports, the most interesting Prize candidates for the year are presented and finally the winning candidates are chosen from this group. The announcements are made during the first half of October each year. The awarding ceremony takes part December 10 in remembrance of the day Alfred Nobel passed away.

The Nobel Prizes have been well received worldwide and the idea expressed in Alfred Nobels testament lives on.

The Nobel Prizes award :

- **extra ordinary achievements in natural sciences**
- **promotion of peace**
- **idealism in literature**
- **that are being publicly recognized worldwide in December each year.**

Most importantly the Nobel Prizes stimulate freedom of thought, fantasy and creativity. Key factors for continued development and for the making of new discoveries of importance for mankind.